

IN THE CLAIMS:

1-18. (Canceled)

19. (Previously Presented) A method for bonding a transmission line to the inside diameter of a downhole tool, comprising the steps of:

positioning a transmission line near the inside wall of a downhole tool;

positioning a mold near the transmission line and the inside wall;

injecting a bonding material into the mold such that the bonding material bonds the transmission line to the inside wall;

curing the bonding material; and

removing the mold from the bonding material.

20. (Canceled)

21. (Original) The method of claim 19, further comprising prepping the surface of at least one of the inside wall, and the transmission line, before injecting the bonding material.

22. (Original) The method of claim 21, wherein the step of prepping includes sanding, grinding, etching, or combinations thereof.

23. (New) The method of claim 19, further comprising forming gaps in the bonding material at desired intervals along the bonding material.

24. (New) The method of claim 19, wherein the downhole tool is selected from the group consisting of drill pipe, hole openers, drill collars, heavyweight drill pipe, sub-assemblies, under-reamers, rotary steerable systems, drilling jars, drilling shock absorbers, and combinations thereof.

25. (New) The method of claim 19, wherein the transmission line comprises a protective covering.

26. (New) The method of claim 25, wherein the protective covering is made of stainless steel.

27. (New) The method of claim 19, wherein a portion of the transmission line is disposed within a channel formed near an end of the downhole tool.

28. (New) The method of claim 19, wherein the transmission line is a coaxial cable, copper wire, optical fiber, waveguide or combination thereof.

29. (New) The method of claim 19, wherein the step of positioning a mold near the transmission line and the inside wall includes pressing the mold against the wall with a clamping mechanism.

30. (New) The method of claim 29, wherein the clamping mechanism is a pneumatic or hydraulic cylinder.

31. (New) The method of claim 19, wherein the mold comprises a heating element.

32. (New) The method of claim 19, wherein the mold comprises a cooling channel.

33. (New) The method of claim 19, wherein the mold completely encircles the transmission line.